

INTERNATIONAL SEARCH REPORT

International application No
PCT/IT 03/00234

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 D02G1/16 D01H1/115 D02G3/38

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 D02G D01H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 100 725 A (MAGEL BERNARD) 18 July 1978 (1978-07-18) column 4, line 56 -column 6, line 61 ----	1-5, 10-12, 15,17, 18,21-26
X A	US 4 497 167 A (MORIHASHI TOSHIFUMI ET AL) 5 February 1985 (1985-02-05) the whole document ----	1,3,4, 11,22,23 5
X A	US 5 497 608 A (MATSUMOTO MITSUO ET AL) 12 March 1996 (1996-03-12) the whole document ----	1,3,5, 11,22 6
A	US 3 822 543 A (EDAGAWA H ET AL) 9 July 1974 (1974-07-09) column 4, line 37-58; figure 4 -----	1,3,4

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

9 December 2003

Date of mailing of the international search report

18/12/2003

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

V Beurden-Hopkins, S

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/IT 03/00234

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4100725	A	18-07-1978	DE 2633244 A1	10-02-1977
			FR 2318956 A1	18-02-1977
			GB 1558612 A	09-01-1980
			JP 52015646 A	05-02-1977
			NL 7608225 A	27-01-1977
US 4497167	A	05-02-1985	JP 1320069 C	29-05-1986
			JP 58136839 A	15-08-1983
			JP 60007048 B	22-02-1985
			JP 1487855 C	23-03-1989
			JP 58136840 A	15-08-1983
			JP 63036372 B	20-07-1988
			CH 662585 A5	15-10-1987
			DE 3303686 A1	18-08-1983
US 5497608	A	12-03-1996	IT 1197560 B	06-12-1988
			JP 3212626 B2	25-09-2001
			JP 4272246 A	29-09-1992
			JP 3137681 B2	26-02-2001
			JP 5005225 A	14-01-1993
			CA 2051856 A1	23-08-1992
			DE 69114691 D1	21-12-1995
			DE 69114691 T2	28-03-1996
US 3822543	A	09-07-1974	EP 0505641 A1	30-09-1992
			KR 9602922 B1	28-02-1996
			JP 55026215 B	11-07-1980
			GB 1398985 A	25-06-1975
			IT 959737 B	10-11-1973